# SUPPLEMENT.

# je Kining Iournal,

OMMERCIAL

No. 1442.—Vol. XXXIII.]

LONDON, SATURDAY, APRIL 11, 1863.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

JOURNAL STAMPED.... SIXPENCE. UNSTAMPED. FIVEPENCE.

BY HER MAJESTY'S ROYAL LETTERS PATENT. E SPILL & CO.'S IMPROVED MACHINERY BELTING WARRANTED NOT AFFECTED BY HEAT, WATER, OR GREASE, AND MADE TO ANY LENGTH IN ONE PIECE.
PRICES PER FOOT RUN. 0 3 0 4 1/4 0 6 0 7 1/4 0 9 0 10 1/4 1 0 1 1 1/4 1 6 1 7 1/4 1 6 1 7 1/4 1 6 1 7 1/4 1 6 1 7 1/4 1 9 1 10 1/4

Prize Medal, International Exhibition, 1862.



STATIONARY ENGINE. PORTABLE STEAM CRANE. CONTRACTORS' LOCOMOTIVE.
From to 30 horse power.

From the STRENGTH, SIMPLICITY, and COMPACTNESS of these ENGINES, they are now extensively used for general purposes; also in situations where steam-engines of the ordinary construction cannot be applied.
STATIONARY ENGINES,—require no building in, nor chimney stalk, and with our patent forced combustion apparatus will burn inferior qualities of coal, wood, or peats.
These engines are specially suited for shipment, and may be packed inside the boiler, to economies freight.
FORTABLE STEAM CRANES,—for wharf or railway, with wrought-from carriages on wheels, link motion, foot brake, &c., all under the easy control of one man; the larger sizes holsis, lower, and turn round in either direction by steam.—These Cranes were selected by II.M. Commissioners for receiving and sending away the heavy machinery at the International Exhibition of 1862.
CONTRACTORS' LOCOMOTIVES,—are adapted to work on rails or transways, of a guage from 2 feet upwards. They are complete and efficient locomotives, simple in construction, and the working parts easily got at for repair. They draw heavy lodes at reduced speeds. These engines are usually sent in one package, ready for work on arrival.

LIGHT FORTABLE STEAM CRANE.

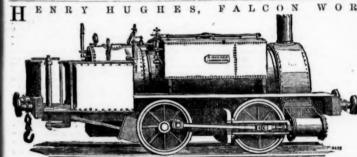
OCHERACTORS' LOCOMOTIVES.

ALEXANDER CHAPLIN AND CO... CRANSTONHILL ENGINE WORKS. GLASGOW.

ALEXANDER CHAPLIN AND CO., CRANSTONHILL ENGINE WORKS, GLASGOW.

LONDON OFFICE,-9, ADAM STREET, ADELPHI, W.C. LONDON DEPOT AND WHARF,-LOWER FORE STREET, LAMBETH, S. Several engines of each class kept in stock, for sale or hine; and all our manufactures guaranteed as to efficienct, material, and workmanship.

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This LOCOMOTIVE ENGINE has been DESIGNED expressly for CONTRACTORS and MINERAL RAILWAYS. It is VERY STRONG in EVERY PART, and, being mounted on small wheels close together, will MOUNT STEEP GRADIENTS and TURN SHARP CURVES.

The BOILERS are of the BEST PLATES, with fire-boxes of Low Moor, are clothed with hair felt, lagged and covered with sheet iron, and PROVED to a PRESSURE of TWO HUNDRED POUNDS PER SQUARE INCH.

The TYRES are of the BEST YORKSHIRE IRON, and of GREAT THICKNESS. The tank contains 250 gallons.

The FITTINGS consists of BUFFERS, POWERFUL BRAKE, GIFFARD'S INJECTOR, ROSCOE'S OILING APPARATUS, PRESSURE GAUGE, WATER GAUGE, and BLOWER to GET UP STEAM.

The engines are all tried before leaving the works, and an expended man sent with them free of cost.

Full specification on application.

10 in. cylinders, 15 in. stroke, price £500.

MESSRS. KNOWLES AND BUXTON, CHESTERFIELD,
MANUFACTURERS OF PATENT TUBULAR TUYERES.





Delivered at Chesterfield station. Terms, nett cash quarterly.

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The SUPERIOR QUALITY of GARNOCK, BIBBY, AND CO.'S WIRE-ROPE was FULLY PROVED by a RIVAL MANUFACTURER at the LIVERPOOL PUBLIC TESTING MACHINE, on the 29th of October, 1860, on which occasion Gannock. Bibbs, and Co.'s ropes were found to be the STRONGEST of all the TWELVE SAMPLES from different makers then tested, as reported in the papers of the day. For example:—

(Certified by Mr. William Macdonald, superintendent.)

Garnock, Bibby, Corresponding sizes from other manufacturers.

Sizes. Tons c. Tons c. Tons c.

3/2 in. ... 18 5 \* .... 16 10 .... 11 10

2/4 in. ... 18 5 \* .... 16 10 .... 1 10

Remaining sizes with similar results.

Samples taken promisenously from stock by a rival manufacturer's agent.

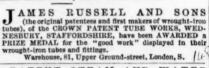
GARNOCK, BIBBY, AND CO.,

SWAN HEMP AND WIRE ROPE MANUFACTURERS,

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FLAT and ROUND STEEL and IRON WIRE ROPES for MINES, &c., of SUPERIOR QUALITY.

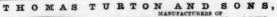
International Exhibition, 1962—Prize Medal.

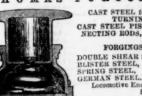


PATENT STEAM AND WATER PRESSURE AND VACUUM GAUGES.
These GAUGES are MADE to INDIDICATE ANY PRESSURE from ONE
to TWENTY THOUSAND POUNDS
upon the SQUARE INCH. EACH GAUGE 1s GUARANTEED FOR FIVE YEARS.

PATENTEE AND MAKER. ANDREW BARCLAY, ENGINEER,







T U R T O N A N D S O N S,

CAST STEEL for PUNCHES, TAPS, and DIES,
TURNING TOOLS, CHISELS, &c.

CAST STEEL PISTON RODS, CHANK PINS, CONNECTING RODS, STRAIGHT AND CRANK AXLES,
STRAIGHT AND CRANK AXLES,
FORGINGS OF EVERY DESCRIPTION.

DOUBLE SHEAR STEEL,
BLISTER STEEL,
SPRING STEEL,
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Locomotive Engine, Railway Carriage and Wagon
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Illustrated Catalogue, with Prices, forwarded on receipt of 12 stamps.

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International Exhibition, 1862-Three Prize Medals for

Mechanical Rubber.

NORTH BRITISH RUBBER COMPANY (LIMITED),
CASTLE MILLS, EDINBURGH.
WAREHOUSE,—56, CANNON STREET WEST, LONDON, E.C.
MANUFACTURERS of VULCANISED INDIA-RUBBER for MECHANICAL
ENGINEERING, RAILWAY, and AGRICULTURAL PURPOSES.
PARMELEE'S PATENT INDIA-RUBBER MACHINE BELTING, now in use in
most of the principal factories in Great Britain, and which was employed by H.M. Commissioners of the Exhibition of 1862 upon all their engines in the Western Annexe, besides driving over fifty other machines belonging to exhibitors. Its superiority over all
other belting consists in its perfectly even surface, combined with sufficient elasticity
to enable it to "hug" the pulley, preventing slipping, and thus effecting a great saving
of power. It will not stretch in damp or wet places, and, unlike leather, is not affected
by exposure to the weather, thus rendering it invaluable for paper works, saw mills,
threshing machines, &c. It can be made of any size or strength for main driving bands,
and at one-third the cost of leather. All belts are stamped with the company's name,
and at one-third the cost of leather. All belts are stamped with the company's name,
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and the company's name, and content of the company's name,
and content of the company's name, and are warranted.

and at one-third the cost of leather. All bells are stamped with the company's name, and are warranted.

INDIA-RUBBER DELIVERY and SUCTION HOSE does not require drying after use, never rots, always fexible, no loss of power by leakage, and can be made of any size and to stand any pressure. The only hose which is strong enough to be used on steam fire-engines.

VALVES for MARINE and LAND ENGINES, up to 6 ft. in diameter.

WASHERS and SHEET RUBBER for STEAM, WATER, 6AS, and AIR JOINTS. BUFFERS, BEARING SPRINGS, and DIRAW SPRINGS for RAILWAYS.

DECKLE STRAPS for PAPER MAKERS, insuring a perfect edge, and wasting no pulp. BREAST APRONS for PAPER MACHINES.

TUBING for CONVEYING ACIDS and OTHER LIQUIDS, GAS, &c. CORL-PISTON PACKING—INSELTION RUBBER GAS BAGS, for REPAIRING MAINS.

BILLIARD and BAGATELLE STRIPS, RINGS, &c. VULCANISED INDIA-RUBBER MOULDED to ANY FORM. All the above are manufactured without the use of solvents, whereby the strength of the rubber is retained permanently.

INTERNATIONAL EXHIBITION, 1862.

This company are the only manufacturers in Great Britain to whom medals were awarded for mechanical rubber.

Prize Medals-International Exhibition, Class 1 and 2.



Fully described in the MINING JOURNAL of July 5.

CREASE'S PATENT EXCAVATING MACHINERY.

for SUPERSEDING the SLOW and EXPENSIVE USE of MANUAL LABOUR:
In SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to
drive through any rock of average hardness at a minimum rate of 1 fm. per diem, and
to sink shafts at the rate of 2 fms. in three days.

Mr. Creass will undertake contracts for sinking shafts, driving levels, &c., at an enormous reduction of time and great avening in cost.

Applications to be addressed (for the present) to the patentee, Mr. E. S. Crease,
Dolgelly, North Wales.

By providing the power of calculating the time and cost to explore a certain depth
and extent of ground, speculation in mining will be assimilated to commercial pursuits,
with this unmistakable advantage—that when the ground has been once carefully and
judiciously selected, and operations properly and systematically carried out for its de
velopment, there would be far less chance of unsatisfactory results than are met with
by merchants and manufacturers in the usual routine of their business. As this important invention must beneficially interest the landowners, mine proprietors, merchants, and miners, we opine it will meet with immediate adoption. — Mining Journal.

CARSON'S ORIGINAL ANTI-CORROSION PAINT.

CARSON'S ORIGINAL ANTI-CORROSION PAINT.

It is extensively used at home and abroad for all kinds of OUT-DOOR WORK,
and will be found a most efficient and economical preservative for HEAD GEARING OF COLLIERIES, MINES, WOOD AND IRON WORK of all descriptions; also TRUCKS, WAGONS, ETC., ETC.,
Lasting twice as long as the best common paints in exposed situations, being an antimediated expressly for external purposes.

ANY PERSON CAN LAY IT ON, and its superiority may be inferred from the opposition with which its use has been met by those interested in the sale of ordinary paints. (No grinding is requisite.)

Five cwts. AND UPWARDS, CARRIAGE FREE, TO ANY STATION IN ENGLAND AND WALES, AND FER STEAMER TO MOST FORTS IN ENGLAND AND SCOTLAND. Patterns, prices, also copy of testimonials, will be sent on application to

y of testimonials, will be sent on application to

WALTER CARSON AND SONS,
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LONDON, E.C.
NO AGENTS THROUGHOUT THE UNITED KINGDOM.

WASTE NO OIL.

| WASTE NO OIL. | C | S | T | E | R | N | S | NOT LIABLE TO LEAK, and ECONOMISE SPACE in the STORES:—
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TO IRON AND COAL MASTERS, &c.

I M P R O V E D B L A C K V A R N I S H,
FOR FREVENTING IRON FROM RUST, AND WOOD FROM DECAY.
A brilliant jet black, superior to paint in appearance, dries in leas time, contains preservative qualities of the best description, and is economical in its use: one gallon at 1s.
Is equal to 14 lbs. of paint, which costs 4s.
For Collinky Head Gearne, Railwat Wagons, Bollers, Carlings, Caral Boats.
&c., it is aspecially adapted. In casks containing 10, 15, and 20 cwts. each. In quantities of 1 ton and upwards, price £11 per ton.
GLOVER AND CO.,
No. 40 MANESTY LANE, LIVERPOOL.

THE COAL MINE INSPECTION ACT, AND ITS WORKING. THE GOVERNMENT INSPECTORS' DIFFICULTIES.

We recently referred to a case, heard before the Whitehaven magistrates connected with the Whitehaven Hemstite Iron Company's Collieries, and we remarked that we considered that the local influences in favour of the company were so great that it was almost impossible to hope that justice could be secured by the representative of the Government, and we have now been favoured with a copy of the memorial of the directors to the Home Secretary, with the Government Inspector's annotations thereon. Home Secretary, with the Government Inspector's annotations thereon. That the pit was not managed in the very perfect manner inferred by Mr. T. E. FORSTER, and that it was not always in the highly salubrious condition which he swore it was at the precise time he visited it, are conclusions which, we think, most of our readers will already have arrived at; and we feel convinced that those who may have the opportunity of reading the memorial to Sir George Gree will consider that these conclusions are perfectly justifiable. In alluding to our report of the hearing of the case before the local magistrates, the directors of the Whitchaven Hematite Iron Company in their letter, which we published in the Mining Journal of March 7, complain "that the misrepresentations and suppressions of material facts by our correspondent are so flagrant and numerous that it is utterly impossible to notice them within the compass of an ordinary letter;" and as we have now the annotated memorial before us, we will letter;" and as we have now the annotated memorial before us, we will endeavour to repair any omission that may inadvertently have been made, and at the same time to prove to the directors of the company that to sup-

and at the same time to prove to the directors of the company that to support the charge that our report is inaccurate requires something more than the mere assertion that it does not agree with the reports in the local papers.

In recording the facts as they appear in the document in question, we shall keep as nearly as possible to the chronological arrangement, in order that "misrepresentations and suppressions of material facts" may be the more easily detected, should they occur. We must commence with Janary 12, when William Barrett, a coal miner, employed in the No. 2 pit, wrote a letter to Mr. Dunn, the Government Inspector for the district, of which the subjoined is a copy:—

which the subjoined is a copy:-

of which the subjoined is a copy:—

"DEAR SIR.—I take the liberty of writing these few lines to let you know how I am, and some others of my feilow-workmen, treated. We have to come home every other day, and cannot get into our workings, they is that full of fire-damp, and these last four days I could not get within 20 yards of my place. I can assure you, sir, they would have fired in the lampe at the very flat; and because I said I would let the Government Inspector know about it I got my notice to leave the colliery. If you don't try and make them better ventilate the pit there will surely one day or another be a slaughter of human beings. She is in a said after a present, and I am informed the other pit is no better. This is at No. 2 coal pit, at Cleator Moor, Cumberland.

With Barrett, Coal Miner, Queen-street, Robinson Fold, Whitehaven."

no better. This is at No. 2 coal pit, at Cleater Moor, Cumberland.

Mr. Dunn visited Whitehaven, in reference to this letter, on Jan. 20, and had an interview (to which no reference is made in the directors' memorial to Sir G. Grey) with Taylor, the overman, who admitted that Barrett had lost many days owing to the pit being foul, and that he had not other places to give him. He admitted, also, that they were obliged to shorten the holings for ventilation because of the gas.

Upon the following day, Jan. 21, Mr. Dunn had an interview with two of the directors of the company, Messrs. Thompson and Postlethwaite, showed them Barrett's letter, and told them that from enquiries he had rande at the pit (No. 2) he was satisfied that it was in a foul and dangerous state; and that he thought they should intercede with the manager to prevent Barrett's discharge for having written to him. The directors stated in reply, that as Mr. Thomas Emmerson Forster had just certified that the ventilation of the pit was very good, they thought Barrett's complaint unfounded, and declined to intercede with the manager, remarking that they were very sure he would have good grounds for dismissing the man. With respect to Mr. Forster's report, Mr. Dunn considers that the reference to the ventilation was quite general; and, after seeing the single door at No. 2 pit, and the firing of his lamp in the main forchead, he sets it at nought. Mr. Dunn cannot tell from the report that Mr. Forster had been into the workings complained of at all. We may remark that in judging of the relative accuracy of Taylon's and of Mr. Forster's statements, it should be borne in mind that Mr. Forster's report is based upon a visit made on Dec. 18, and that Taylon's statement to Mr. Dunn was made on Jan. 20.

A meeting of the directors of the Whitehaven Hematite Iron Company

A meeting of the directors of the Whitehaven Hematite Iron Compa

made on Dec. 18, and that TAYLON'S statement to Mr. Dunn was made on Jan. 20.

A meeting of the directors of the Whitehaven Hematite Iron Company was held on the succeeding day, Jan. 22, and a letter was then written to Mr. Dunn, in which the directors state that the result of their investigation was that the man Barner T was discharged for having used abusive language to TAYLOR; they express their regret that Mr. Dunn did not visit the workings of No. 2 pit, which they heard he could easily have done by means of Whinney Hill Pit. In reply to this, Mr. Dunn says that Whinney Hill Pit shaft was reported to him to be in a dangerous state by their own people. Mr. Dunn further says that the stories of Barnerr and Taylor as to the immediate cause of the discharge differed in toto, and that the directors would nover allow them to be brought face to face.

On Jan. 24 Mr. Dunn wrote to Mr. Thompson requesting that the shafts might be examined preparatory to his coming. On Jan. 24 Mr. Balles wrote (though the directors do not refer to the letter in their memorial) Mr. Dunn that he had received his note, and had requested the engineer to examine the shafts (No. 2 and Whinney Hill), and that as soon as he had done so he would transmit his report to Mr. Dunn. Respecting tracing of drifts, he would get it made as soon as he possibly could, and send it. A few days afterwards, on Jan. 28, Mr. Dunn went over to White-haven and met Mr. THOMPSON and Mr. Steel to accompany Mr. Dunn down the pit; and after a letter (which was not shown to Mr. Dunn) had passed between Mr. THOMPSON and Mr. Balles, the manager, it was decided that Steel should not be permitted to go down. The memorial goes on to say that "Mr. Dunn and Mr. Balles then went down No. 2 pit and met the overman, TAYLOR, at the bottom, who also went with them. They proceeded to the workings Mr. Dunn examined them carefully, but failed to detect any fire-damp whatever." With reference to this latter assertion, Mr. Dunn says that it is "false. Gas was discovered in the leadi

with. Here we come to some directly contradictory statements.

The directors asy—"With respect to the slogic door, Mr. Dunn was reminded by Mr. Balles that Mr. Foneren had recommended this door to be made double, and that Mr. Dunn had seen the materials for making the alteration lying close to the door at the pit, we suppose, when he was in the pit."

Mr. Dunn says that this is untrue. Not such a word was spoken, and that the door is now doubled by his emphatic remonstrances.

The barometer was in Whitehaven being repaired.

The directors say—"With respect to the section that had not been produced, Mr. Dunn was informed that the reason why it was not at the works was in consequence of his having come to the pit without previous notice, and that it happened to be at Mr. Balles' lodgings."

Mr. Dunn says that this is untrue; the section had lain dormant since the leaving of Mr. Swainson, months ago.

The directors express their regret that Mr. Stell was not allowed to go down the pit. Mr. Dunn says the deery. The letter written from Mr. Thourson to Mr. Balles, Mr. Dunn says—"Query. The letter written from Mr. Thourson to Mr. Balles.

Mr. Dunn says—"Query. The letter written from Mr. Thourson to Mr. Balls, whilst we were there was not shown."
The directors say—"Mr. Balls attended without loss of time to Mr. Dunn's recommendation as to a double door, and informed him of having done so by letter dated Jan. 31."

It would seem that, on Feb. 2, Mr. Dunn forwarded a letter of instructions, but of this we have no copy. On Feb. 3, Mr. THOMPSON wrote:-"I am obliged by your favour of yesterday, which I have shown to our directors, and they request me to inform you that the instructions therein given shall be carried our forthwith."

This disposes of No. 2 pit, the ventilation of which appears to have much improved by Feb. 12, when Mr. Atkinson went down, and we now come to the Hope Pit, in relation to which the information was laid. The directors state that they received no complaint as to the Hope Pit till the summons was served; this, Mr. Dunn says, was because they were so discourteous to him. Their discourtesy, we think, cannot be doubted, nor is there any doubt as to the state of the pit. On Feb. 11, Messrs. Dunn and Atkin-

son went down the Hope Pit, when the quantity of air in the return current was found to be 13,228 cubic feet, about 8000 feet of which went into the workings. Near the Bannock band seam the anemometer would not work at all. After examining the workings, they went to the cabin, near the bottom of the pit, when Mr. Bailes asked the Inspectors "Whether, apart from the ventilating power, they had any fault to find with the internal arrangements of the pit?" Mr. Dunn replied—"That is a commercial question." Mr. Bailes said he wished it to be understood as a pit question. Mr. Atkinson, addressing Mr. Bailes, said, "I do not blame you, it is the ventilating power that is wanting. I think the Hope Pit would be a good place to try a ventilating-fan, similar to that used by the Pneumatic Despatch Company;" whereupon Mr. Dunn observed, that "before the engine and fan could be erected Mr. Bailes would have the pits holed, and the new ventilating furnaces applied, when the ventilation of the pit would be complete." The directors say Mr. Bailes is now driving to hole, but Mr. Dunn contends that at the time of his visit, although preparations had been made for holing, nothing was being done in that direction. On Feb. 13, the summons was served for bad ventilation.

The directors complain that Mr. Dunn never made any suggestions (already contradicted), and that he was not justified in preferring the criminal charge against their manager, especially as he knew that they were advised by Mr. Forster. In reply to this, Mr. Dunn says—"I prefer my own experience to Mr. Forster's report." The directors further complain that in addition to the criminal charge which was preferred, Mr. Dunn made other charges of bad management against the' company, which were wholly unfounded. In answer to this statement, Mr. Dunn says that he "can produce numerous letters, to the effect of the dangerous state of the colliery, which are herewith sent" (that is, to the Home Secretary). son went down the Hope Pit, when the quantity of air in the return cur-

were wholly unfounded. In answer to this statement, Mr. Dunn says that he "can produce numerous letters, to the effect of the dangerous state of the colliery, which are herewith sent" (that is, to the Home Secretary). We believe that the above abstract contains every material point alluded to in the memorial, and in judging of the extent to which Mr. Dunn was justified in laying the information, it must be remembered that it was stated before the Whitehaven magistrates, and not denied by the company, that so long ago as Feb. 10, 1862, Mr. Dunn called their attention to the dangerous state of the pit; that shortly after an accident occurred, by which two men were killed; and that before the Whitehaven magistrates it was contended, on behalf of the company, that "unless the pit had been full of inflammable gas there was no offence under the Act of Parliament"—a position which, if acknowledged, would render the governmental inspection of collieries the most dangerous farce conceivable; and that it may not be supposed that any attempt is made to question Mr. T. E. Forster's ability, we may observe that Mr. Dunn admitted it before the Whitehaven magistrates, but states that he is not inclined to let Mr. Forster rule and govern him in facts he saw before his face. ern him in facts he saw before his face.

THE COAL TRADE OF New SOUTH WALES.—We have received from our old correspondent, Mr. John Mackenzie, mining engineer, formerly of Wigan, and now, we rejoice to learn, practising his professional duties at Newcastle, West Mnitland, some interesting particulars, from which we learn the actual state of the coal trade at the antipodes. Mr. Mackenzie considers that Prof. McCoy has done the New South Wales coal field a great injury by stating so positively as he has that the coal fields are of the colitic formation, but Mr. Mackenzie, in conjunction with the Rev. Mr. Clarke, is preparing a section which, it is hoped, will convince geologists in the Old Country of the incorrectness of Prof. McCoy's statements. Mr. Mackenzie is surprised that he should have so positively contradicted what Mr. Clarke stated as to the succession of the beds containing the fossil flora and fauna, when the Professor has never seen the coal fields of gits in the Old Country of the incorrectness of Prof. McCoy's statements. Mr. Mackenzie is surprised that he should have so positively contradicted what Mr. Clarke stated as to the succession of the beds containing the fossil flora and fauna, when the Professor has never seen the coal fields of New South Wales. The section will show about 14 different workable seams of coal already proved in the Newcastle district, and the coal fields are of great extent, and not so much disturbed as the generality of the English coal fields. Mr. Mackenzie has seen most excellent coal there, with only 6 feet of covering on it. English coal can now no longer compete with this in the Australian market, for the supply is now greater than the demand. During six or seven months Mr. Mackenzie has occupied himself in exploring geologically the stratification of the country pierced by the shafts of the different mines at work, and he has accumulated a very interesting and instructive collection of rocks and fossils. The order of superposition in which Mr. Mackenzie places the coal seams is as follows:—First, the Newcastle seam, including the A. A. Company's, the Coal and Copper Company's, the Waratah, the Wallsend, and the Minmi, all of which he considers identical; secondly, the East Maitland; thirdly, the Morpeth; fourthly, the Tomago; and, lastly, the Stony Creek. Of the vastness of the coal basin in the Hunter Mr. Mackenzie speaks in great admiration, and also of the fact of the seam being apparently less disturbed than in the English coal fields. Mr. Mackenzie is assisted in completing his section by the Rev. W. B. Clarke—a fact which of itself is sufficient to introduce Mr. Mackenzie favourably to the Australian public. That't it may not be supposed that the views which will be propagated by Messrs. Clarke and Mackenzie may be erroneous, it may be stated that the Sydney Empire, referring to the subject, remarks that Dr. Oldham, the highly accomplished director of the geological survey of India, has spoken out recently on this top

have been so strenuously advocated by Mr. Clarke must be sustained.

Detection of Fire-Damp in Collieries.—Mr. W. Keene, the Government Examiner of Coal Fields in New South Wales, proposes to detect fire-damp by means of a square open-bottomed tin box, with a glass window in one side. There is a corked aperture at the top, and a small pan at the bottom for holding a candle. The quality of the air is judged of by the length of time the candle will burn, pure air is consumed in about six minutes, and air unfit for human respiration will extinguish the light in less than three minutes.

COPPER MINING IN LAKE SUPERIOR .- The yield of the copper mine COPPER MINING IN LAKE SUPERIOR.—The yield of the copper mines of this region during the year 1862 amounted to 9000 tons of ore, being a decrease of more than 10 per cent, as compared with the preceding year. This decrease is, however, partly compensated by the higher produce of the ore. The yield in the several districts was—Portage Lake, nearly 3900 tons; Ontongon, 2725 tons; Kaweenaw, 2990 tons. In the Portage district, the Quincy (1200 tons) and the, Pewabic (1000 tons) were the highest, and the Mesonard (33 tons) the lowest. In the Ontonagon district, the Minesota (1500 tons) is the highest, and in the Keweenaw district the largest yield (1630 tons) was from the Cliff Mine. In Portage Lake district there were 7 ore-producing mines; in the Ontonagon district 12 producing mines; and in the Keweenaw district there were 10 producing mines: making a total of 29 Lake Superior copper mines ountributing to the aggregate product for the year. The average from each of these mines was about 300 tons of mineral, containing 230 tons of metal. The Lake Superior mines would, consequently, place about 700 tons of copper on the market during the year.

The known Trade of Lake Superior scrowing important. During 1862.

The Iron Trade of Lake Superior is growing important. During 1862,

of rough copper shipped from the same region in 1882 is stated at \$3,000,000. CARRIAGE-WAYS AND FOOTPATHS.—Sir John Scott Lillie, Knight and Companion of the Military Order of the Bath, of Pall-mail, has lately taken out spatent for the construction of carriage-ways or footways with gutta percha, asphate, asphalted felt, wood, or other suitable material or combination of such materials, rendered imperficus to water by a solution of casoutchouc or other solution suitable for that purpose. When such carriage-ways are intended for heavy traffic, he causes the same to be studied with metallic bolts, or with bars of from or rows of metallic bolts or studs; such rows to be placed transversely, or at right angles to the line of traffic, at intervals of not less than 3 in. apart.

A SUB-DRAINING RAILWAY PAVEMENT.-Mr. L. Stebbins, of Worces ter, Mass., has invented a sub-draining railway pavement, with which he proposed to cover the entire area of the street. It is made of iron; each block is about 2 ft. square on the arrians, and 2½ in. deep. There are four keys or square bolts to each square foot of surface. These keys rise 3-8ths of an inch above the surface, and yield to the pressure of the horse's block. Each key rests on a rubber spring, which is secured in an iron tabe. The inventor claims that it affords the best known surface for wheels to roll on;

it renders the slipping of horses impossible; its use would prevent, to a great extent, the accumulation of dirt, and greatly reduce the expense incurred by cleaning streets.

—New York Bally Tribuse.

### THE LONDON ASSOCIATION OF FOREMEN ENGINEERS.

In runders the silpping of horses impossible; its saw would prevent, to a great extent, the accomplishing of dirt, and greatly reduce the spream incurrent by elesting streets.—Rev Tork Darilly Tribuses.

THE LONDON ASSOCIATION OF FOREMEN ENGINEERS.
In fulfillment of a promise made in the Journal of March 21, it is now our intention to describe the origin and purpose of a society which has for some years past existed in the metropolis, but which is not so well known among the mechanical branches of the community as its merits and usefulness entitle in to be. The London Association of Foremen Engineers entitle in to be. The London Association of Foremen Engineers of the community of the community

Association for the Prevention of Steam-Boiler Explosions. —At the monthly meeting of this association, held at the offices, Corporation-street, Manchester,—Mr. WILLIAM FAIRBAIRN (President) in the chair.—Mr. Fletcher, chief engineer, presented his report, from which the

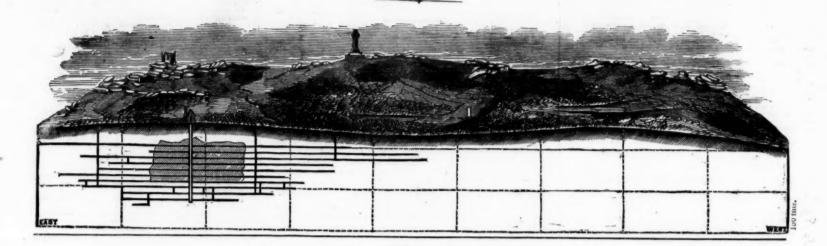
ration-street, Manchester,—Mr. WILLIAM FAIRBAIRN (President) in the chair.—Mr. Fletcher, chief engineer, presented his report, from which the following is an extract:—

"Two explosions have occurred during the past month to bollers not under the inspection of this association, by which 15 persons were killed and 16 others injured, making a total of 31. Both bollers have been personally examined subsequent to the explosion. One explosion occurred at an ironworks to a boller connected to a series of 18 others. It was very similar in general construction, though not precisely ao, to those known as upright furnace bollers, like which, it atool erect, was of a considerable height, and surrounded with brickwork. The workmanship of the boller was satisfactory throughout, and its condition good. A serious oversight has been made in the design of the boller, the top end being hemispherical and the bottom flat. The hemispherical and would, when the steam is fully up and blowing off freely, have an upward pressure of early 250 tons acting upon it, and tending to tear it away from the bottom. There would be an equal downward strain counteracting this, induced by the pressure of the steam upon the crown and tapering sides of the fire-box, combined with that upon the flat plate forming the bottom of the annular water space. As long as the attachment between the bottom and the top of the boiler held good the two forces would be in equilibrio, and the boiler remain at rest upon its bed. But should the attachment fall, the upward force would instantly shoot the top of the boiler up into the lar with a buoyancy of 250 tons, which it may be remarked is equal to the weight of a long railway train, including the engine and tender fully equipped with coke and water. This section is exactly when the bolier fiew up, and was carried to a distance of 160 yards from its original seat. The jury at the coroner's inquest came to the following conculsions, which are quite to when the boiler in the about the revery boiler ought to be supplied

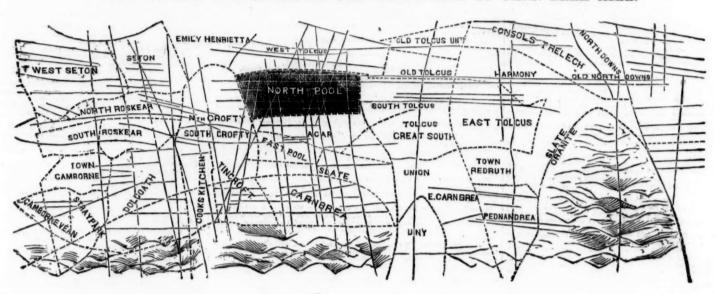
ATMOSPHERIC LIME LIGHT .- We some time since referred to an Ame-ATMOSPHERIC LIME LIGHT.—We some time since referred to an American invention by Mr. G. H. Smith, of Rochester, U.S., for producing a light equal in brilliancy to the lime light, without the use of the artificially prepared oxygen gas, which is well known to be the most costly item in the production of the light—the substitute employed being common atmospheric air at a high pressure. A patent has now been obtained for Mr. Smith in this country, according to which he heats the air previously to throwing it with the ordinary coal gas upon the cylinder of lime. The light produced is described as of great brilliancy, and s, by an ingenious arrangement, Mr. Smith raises the air to the necessary temperature by the heat of a small gas jet, acting upon a hollow chamber through which thealt passes, the economy must be very great. The fact that oxygen charged with impurities fully equal to the foreign ingredients of atmospheric air has already been successfully used in the production of the lime light, is an important point in favour of Mr. Smith's inventions. one oiler, have

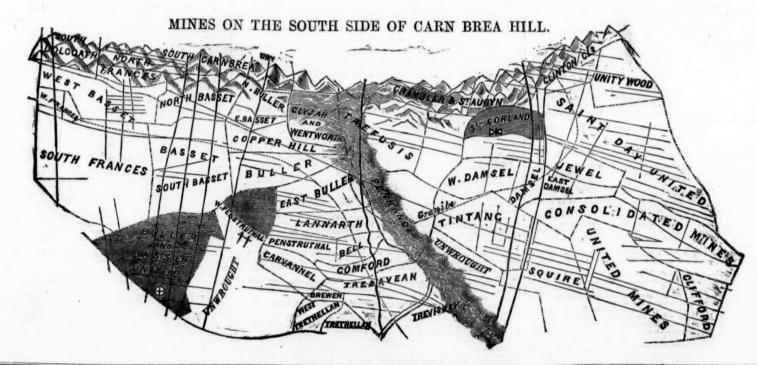
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# NORTH POOL MINING COMPANY.



# A VIEW OF AND THE MINES ON THE NORTH SIDE OF CARN BREA HILL.





# THE NORTH POOL MINE

Is situated to the north of the Carn Brea Hill, around which we have the chief copper and tin mines of the past century. In fact, the district given (6 miles by 4) has yielded for the last 50 years 60 per cent. of all the profits accruing from mining enterprise throughout the two counties of Cornwall and Devon.

It is important to observe the position of North Pool Mine, which is surrounded by West Tolgus to the north, selling at 100 per cent, premium, and not yet developed; with Old Tolgus, that yielded £1,500,000 copper ore; and South Tolgus, a substantial dividend mine, directly to the east. The piece of unwrought ground (called the Glebe), standing to the west, is ceded to the North Pool Mining Company. North Crofty (£78,000 profits), North Roskear, Seton and West Seton stand to the West, whilst the surrounding mines have given the profits enumerated in the subjoined table.

In this district are situated the following mines. We collect from published statistics, that they have declared in dividends the large sum of £3,299,445, and at this date (March, 1863) command a market value of £1,500,947, upon an aggregate expenditure of £696,927:—

				Value.	
Basset	£2,624		£310,144		£40,960
Brewer	1,024		10,600		suspended
Carn Brea	15,000		277,500		60,000
Dolcoath	46,137		251,807		196,900
East Crofty	11,750		78,960		merged
East Pool	3,104		41,264		76,800
North Roskear	14,875		102,000		44,100
Seton	23,166		70,598		97,020
South Frances	9,393		182,218		47,120
Stray Park	28,612		12,500		35,880
Tincroft	54,000		71,050		132,000
Tresavean	3,120		454,422		suspended
Trethellan	1,860		48,441		ditto
Treviskey and Barrier	15,600		37,920		ditto
United Mines	16,000		482,800		merged
North Pool	8,180		61,450		
Treleigh Consols	30,000		5,500		suspended
Buller	1,280		244,672		16,640
Comford	19,200		2,422		suspended
Condurrow	8,960		20,992		24,320
North Basset	14,700		84,300		27,000
South Tolgus	4,096		38,656		34,304
Clifford	nil.		47,442		merged
St. Aubyn and Grylls	7,493				2,425
West Basset	9,000		140,700		84,000
West Damsel	9,856				15,872
West Seton	19,000		145,000		110,000
Great South Tolgus	4,350				39,000
Grambler and St. Aubynes	26,730	••	11,178		8,748
	1				

Outlay. Dividends.

	Mines.	Outlay.	Dividends.			Market Value.	
١	St. Day United	10,750		3,500		3,000	
L	Cook's Kitchen	41,742		3,307		71,050	
1	East Carn Brea	22,500		-		57,000	
1	East Grenville	9,600		_		15,000	
1	Emily Henrietta	7,680		-		9,216	
1	Grenville	46,500		-		34,500	
ı	New Seton	8,600		-		56,000	
1	North Downs	13,000		3,000		18,000	
1	South Carn Brea	40,500		-		25,500	
1	South Seton	14.860		-		10,400	
I	Tolcarne	8,400		_		21,000	
I	Uny	37,581		-		29,696	
ı	West Tolgus	15,104		-		34.816	
ı	South Gorland	7,000		-		15,000	
ĺ	West Penstruthal	4,000		-		7,680	

# NORTH FOOL MINE.

For the guidance and information of the Public, it may be satisfactory here to explain that the "Cost-book sys-tem" constitutes a complete copartnery between the shareholders as regards the mine or adventure in which they are engaged; it also possesses several peculiar ad-vantages over the Joint Stock Act, and especially when contrasted with banking institutions, wherein liability New Seton 8,600 - 50,006
North Downs 13,000 3,000 18,000
South Carm Brea 40,500 - 25,500
South Seton 14,860 - 10,400
Tolearne 8,400 - 21,000
1 Uny 37,591 - 29,696
West Tolgus 15,104 - 34,816
South Gorland 7,000 - 15,000
West Penstruthal 4,000 - 7,680

Tolearne 8,400 - 21,000
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Tolearne 15,000 - 16,000
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## NORTH POOL MINING COMPANY. THE

We the undersigned engage to become shareholders, to the extent set opposite ur respective names, in the mine or adventure called "The North Pool Mining to prays," situated in the Parish of Illogan, in the county of Cornwall, and held or a period of twenty-one years from the Fourteenth day of August, in the year four Lord One thousand eight hundred and sixty-two, at one-eighteenth Dish r Royalty from Thomas James Agale Rosaltyse, Eag., and one fiteenth Dish royalty from John Francis Basser, Esg., to Josiah Samuel Phillips, of amborne and of London, in the Counties of Cornwall and Middlesse, which causes have been granted to and are held by him on behalf of himself and co-bareholders.

hareholders.
We agree that the said Mine or adventure shall consist of sixty-four parts or hares, and that the Company shall be conducted upon the cost-book system, nd that this book shall be the Cost-book of the "North Pool Minimo lompany."
We hereby appoint Mr. Richard Tredinnick, the General Manager of the company, at a salary of One Hundred Guineas per annum until a dividend shall be declared; and from and after such period, then at the salary of Three Hundred fulneas per annum, during the continuance of the said leases, or the working of the said lines.

We do further appoint Mr. John Whitmore Watson, the Secretary of the said Company, at a salary of One Hundred Guineas per annum, and further agree that the business of the said "The North Pool Minne Company," shall be conducted and carried on at No. 13, Cornhill, London, E.C.

(Signed by the several Shareholders.)

We do also agree that the following shall be the Rules and Regulations for the government of the Company:—

That meetings of the shareholders shall be held from time at the offices of the Company, of which ten days' notice shall be given to each registered shareholder. The Managor or Secretary, upon application to him by a registered shareholder, shall exhibit at the offices of the Company in London at all reasonable times, all books, papers, and vouchers relating to the affairs of the Company.

The shareholders shall be made up to the latest convenient period, with a list of the shareholders, and be entered in the Cost-book of the Company.

The shareholders shall be made up to the latest convenient period, with a list of the shareholders, and be entered in the Cost-book of the Company.

The shareholders shall pass or disallow the accounts so exhibited by the Manager or Secretary, and shall make calls which may be necessary for the presecution of the works at the mine, or to pay off all liabilities then existing, and may declare a dividend from any profits arising from such mine, and they shall determine on all matters of business appertaining to the due working of the said mine; the determination of the majority of votes present, either in person or by proxy, at all meetings shall be binding on all the shareholders, whether present or not, notwithstanding auch majority of votes present a majority in number of shares constituting the Company; but no shareholder shall be entitled to vote by proxy, unless such proxy shall have been left with the Committee, General Manager or Secretary for the time being.

That in case any call or calls shall remain unpaid for thirty days next after the same shall have been made payable, it shall be lawful for thir Committee in office for the time being shall nearly an expectate such shares forfeited, and the same shall be company in the clares such shares forfeited, and the same shall be eneral Manager or Secretary to committee, or if case the Committee for the time being shall n

the holders of one full fourth part of the shares in the said Company, convene a special General Meeting for the purpose set forth in such requisition, but that the proceedings at such Meeting shall be limited exclusively to the matters specified in such requisition.

That the shares of the said Company shall be transferable in the usual form by notice, to be forwarded to the Manager or Secretary of the Company, who shall immediately acknowledge the receipt of such notice, and on payment of all calls then due on the share or shares required to be transferred, or at the option of the Committee, General Manager, or Secretary, on the aggregate number of shares held by such transferred, the transfer shall be duly registered in the books of the Company. That all calls shall be paid to the General Manager or Secretary, or to the Bankers of the Company, within fourteen days after notice of the call shall have been forwarded to each shareholder, such notice to be forwarded per post as hereinbefore provided.

That every shareholder is hereby bound to bear his proportion of the expenses incurred in the prosecution of the Company, or in the working of the mine; but he may, at any time, withdraw himself from all further liability by giving the Committee, Manager, or Secretary of the Company notice in writing of such his intention so to withdraw, and by paying his proportion of all debts and liabilities of whatsoever nature or kind that may have been incurred previous to such notice of withdrawal shall have been given, and by relinquishing, by some deed or instrument to be approved at a General Meeting of Sharoholders, all his or her shares, and all his or her right and title to the engines, tools, tackle, materials, ores, and other property of the Company, or any part thereof; but, nevertheless, such shareholder, or committee of a lunatic shareholder, or assignee of a bankrupt shareholder, or committee of a lunatic shareholder, or committee of a lunatic shareholder, or committee of a lunatic shareholder, or committee of a

of Administration, Price, vihold such shares.

That no additional ground shall be taken on behalf of the Company or any portion of the present grant disposed of without the consent of the majority of the
shareholders at a Special General Meeting to be convened for that purpose, and of
which Meeting at least fourteen days notice shall be given to each registered
shareholder, in the manner hereinbefore provided.

(Signed by the several Shareholders).

TO THE SHAREHOLDERS.

TO THE SHAREHOLDERS.

GENTLEMEN,

It is, in my opinion, highly expedient to determine with accuracy at starting, so far as practicable in mining enterprises, the best plan and modus operandi for the efficient, practical, and economical working of the five known lodes traversing the company's grant. That these lodes contain minerals in paying quantities, no one acquainted with the district and property, can for one moment doubt. The first question to consider is to start the Engine Shaft in a proper position, so as to command the lodes referred to and develop them at the smallest possible expenditure both in time and money. It must be borne in mind, that West Tolgus is to the north; Agar, East Pool, and Carn Brea, are to the south; North Crofty, North Roskear, Scton, and West Scton, to the west; with the cluster of Old, South, and Great South Tolgus to the east. The same cross-courses that traverse Carn Brea, East Pool, and Agar, pass into North Pool.

The cross-course, which I regard as most important, is that which has made the rich deposits of ore in Bast Pool; shares in which now command a market value of

Agar, East Pool, and Carn Brea, are to the south; North Crofty, North Roskear, Seton, and West Seton, to the west; with the cluster of Old, South, and Great South Tolgus to the east. The same cross-courses that traverse Carn Brea, East Pool, and Agar, pass into North Pool.

The cross-course, which I regard as most important, is that which has made the rich deposits of ore in East Pool; shares in which now command a market value of 600f. sach.

The main lode at North Pool stands in virgin ground for 200 fathoms west and 600 fathoms east, are wholly unexplored, and, therefore, in my opinion, a shaft should be started from surface, in close proximity to this cross-course, and in such a position as to open out these lodes with practical despatch and outlay.

Two excellent and well-timbered shafts were sunk by the former Company, at a cost of several thousand pounds, to cut the lodes at these points, but without attaining either object; one called Bendigo Shaft, is 20 fathoms deep, or 24 fathoms under the adit lovels; situated about 300 fathoms from Bendigo Shaft, 400 fathoms from the western boundary, the other, Ballasrat Shaft, is 48 fathoms deep, or 24 fathoms under the adit lovels; situated about 300 fathoms from Bendigo Shaft, 400 fathoms from the west boundary. This shaft is 150 fathoms west from the forebreast at the 36 and 48 fathom levels, and also the Western Whim Shaft, sunk on the lode wrought, and which in partial trials yielded upwards of 60,000, profits upon 4,500, outlay.

Whilst the proposed me with the being sunk, the engine should be crected, and flat rods extended to Ballaarat Shaft, to drain the water from the bottom, and extend therefrom a cross-cut to the main and side lodes, in one of which, it is said, there remains in the old mine, near this shaft, a course of Copper Ore, 15 inches wide, worth from 15.4 to 204, per fathom. By this distribution of forces a comparatively short time will enable us, at the 24 or 48 fathom levels, by five short cross-cuts, to cut the five loads, 150 fathoms spar

having convinced me that the General Manager should devote his time and energies solely to the underground and surface operations.

TO THE ADVENTURERS.

LONDON, March 20, 1863.

TO THE ADVENTURERS,
GRIVILMEN,
Since November, 1862, when active operations were commenced at this Mine,
headdi Lavel, with such Shafts as were imporatively necessary for safety, conrenience, and ventilation, have been cleared and resecured by timber throughout
he old Mine, from East to West, on the course of the Main Lode, to the present
ind; where the men have been employed during the last six weeks continuing
he cross-cut, driven on a cross course to communicate with and discharge the
water from Ballarat Shaft at the Adit Level, which a few weeks will accompilat,
and enable us to ascertain the bearing and underlie of the Lode on which the
Ballarat Shaft has been, and whereon the new engine shaft is intended to be
sunk, or near the East Pool Principal Mineralizing Cross-course, some 150 fms.
turther week.

Ballarat Shaft has been, and whereon the new engine shaft is intended to be sunk, or near the East Pool Principal Mineralizing Cross-course, some 196 fms. further west.

This preliminary work is absolutely necessary, to ascertain the best transverse position for this important Shaft, to take the Lode at proper depth.

Immediately this is attained, I would suggest that this Shaft shall be sunk with all practicable despatch, for a 60-inch Pumping Engine, when required to be erected thereat, and flat rods extended therefrom to Ballarat Shaft, so as to sink these shafts simultaneously near these most important cross-courses to the 45 fathoms Level under Adit, to cross-cut thereon from these Shafts north and south to the Lodes, and drive cast and west thereon.

But as the Western Levels on the North Lodes will be driven into the Glabe Ground, the sinking of Bendigo Shaft may be deferred until Ores are discovered of sufficient value to induce the necessity for the outlay.

All these explorations will be in "Virgin Ground," but most favourably approached and appreciated by the cost of, and names given to the Western Shafts by the last Company.

As the Water will be forked to the 48 fathoms Lovel in the Eastern Mine, three cross-cuts may also be driven north and south, 100 fathoms apart, to the Side Lodes, thereby proving their values in a comparatively short time, longitudinally and transversely, in numerous places through the Sett, opening up an extensive, and, in all probability, a valuable Mine.

I have obtained the opinions of several Mine Agents of long experience, and heard the flattering accounts of those who worked in the Mine, and having otherwise devoted much time and attention to this Property, I am still the more convinced that, the small part worked having yielded a larger profit for the extent of the ground wrought than any Mine in the district, the remainder is as analogically worthy, and will not fail, when properly developed, to become as rich as her neighbours, and fully substantiat the fact of the g

I am, Sirs, Your most obedient Servant. J. S. PHILLIPS.

13, Cornhill, E.C., Loudon, 23rd March, 1863. At a General Meeting of the Proprietors of the North Pool Mining Company, duly onvened by circular, and held at these offices this 23rd day of March, 1863,

Ma. R. TREDITSHICK in the Chair,
And present, Messieurs Roberts, Robins, Webber, Goodeve, Spargo, Phillips, Hurrell,
Watson, Godwin, Paynter, Greville, Vivian, Beazley, Milsted, Vickers, etc., representug fifty 64ts.
The notice convening the meeting was read by Mr. J. Whitmore Watson, the
Secretary.

Secretary.

The title-deeds of the Company were laid upon the table, and the Solicitor, Mr.

Peniston Grosvenor Greville, certified to their correctness.

The statement of expenditure to the 21st February, showing a debtor balance of £214 2s. 6d. against the Shareholders, was read, approved of, and confirmed.

The constitution of the Company was read over by the Chairman and approved of,

of.

The rules and regulations were next read, discussed, and approved of.

The reports of Mr. Richard Tredinnick, the General Manager, and Mr. J. S.

Phillips were read and approved of, and ordered to be entered upon the minutes
of the Meeting.

It was proposed by Mr. Goodeve, and seconded by Mr. Roberts, and Resolved
unanimously—"That a call of £16 per 64th share, be, and is hereby made payable
at the offices of the Company on or before the 10th day of April next; and that 5
per cent. rebate be allowed to Sharcholders who pay up the call on or before
that day."

per cent. relate be allowed to shareholders do by Mr. Milsted, and Resolved It was proposed by Mr. Greville and seconded by Mr. Milsted, and Resolved It was proposed by Mr. Greville and seconded by Mr. Milsted, and Resolved It was proposed by Mr. Milsted Resolved in Committee of Finance

It was proposed by Mr. Greville and seconded by Mr. Milsted, and Resolved unanimously—"That the following Shareholders do form a Committee of Finance; namely, Messieurs Roberts, Webber, Goodeve, Vickers, Robins, and Vivinn; and that they remain in office until the next General Meeting of the Proprietary." It was proposed by Mr. Hurrell, and seconded by Mr. Paynter, and Resolved—"That the General Managor and Secretary shall be empowered to act on the committee, and that the committee shall be empowered to open a banking account in their own names, and that of the General Managor and Secretary. All cheques being signed by two members of the Committee, and countersigned by either the General Managor or Secretary."

It was proposed by Mr. Phillips, and seconded by Mr. Beazley, and Resolved—"That the Company do, from this date consist of 6,400 shares instead of 64 shares as herotofore."

as herotofore."

It was proposed by Mr. Roberts, and seconded by Mr. Spargo, and Resolved—"That It is meeting do recognise the valuable services of Mr. J. S. Phillips, and the appointment of local Purser, Manager, and Agents be vested in the Committee, General Manager, and Secretary of the Company."

It was proposed by Mr. Milsted, and seconded by Mr. Goodeve, that a vote of thanks be presented to the Chairman for his able and courteous conduct in the chair.

Signed by the Shareholders present.

REPORTER'S MINUTES OF THE MEETING.

The first ordinary general meeting of proprietors was held at the offices of the oupany, Cornhill, on Monday, March 23rd, Mr. R. Tredinnick in the chair.
Mr. Whitmore Watson (secretary) having read the notice convening the meet

Company, Cornhill, on Monday, Maren 23rd, Mr. H. Frednance in the chair.

Mr. Whitmore Watson (secretary) having read the notice convening, the meeting.

The Chairman said his first duty was to announce that the title-deeds of the company were upon the table, and that the solicitor (Mr. P. G. Greville) certified as to their corectness.

A statement of expenditure to February 21st, showing a debit balance of £214 2s. 6d., was submitted.

The chairman said that in November last the necessary preparatory work was commenced for the future efficient development of the nine, and the debit balance at the end of February was £214. The secretary would certify as to the expenditure upon the nine.

Upon the question boing put, the accounts were passed and allowed.

The Chairman read over the constitution of the company, and stated that it had been copied in the cost-book, together with the rules and regulations, and signed by the respective parties making up the sixty-four shares; therefore, from these parties all assignments would have to take place. Having read the rules and regulations for the government of the company, he stated that it would be seen that care had been taken to give the shareholders power to rescind any of those rules, and create others, as may from time to time be found necessary; for to him it appeared an absurdity in a property like North Fool, which might become one of the most valuable mines in Cornwall, to adopt established and unalterable rules. According to the united judgments of the solicitor and himself (the Chairman), the rules just read were necessary for the safe and satisfactory conduct of the company's affairs.

Mr. W. C. Vivian thought the rules were ably drawn up, and that they were eminently adapted to meet every requirement; indeed, he did not remember to have seen a more perfect code, or one more strictly in accordance with the Cost-book System.

Mr. Spargo had carefully perused the rules, and saw no reason why they should not

ystem.

Mr. Spargo had carefully perused the rules, and saw no reason why they should not e found all that was necessary, without being cumbrous, for the efficient government of the company's affairs.

A resolution was passed unanimously approving the rules and regulations subnited.

mitted.

The Chairman said, before submitting his report, he might take the opportunity of informing the shareholders that the property of which they were the possessors had from one lode alone produced a nett profit of something like 62,000£, upon an outlay of capital of about 4,200£, but in addition to that lode, there were four others unwrought, each of which presents indications of proving equally remunerative as that which had produced so large an amount, of profit. The machinery upon the nine, the work done, and the shafts sunk, were worth at least 10,000£, but the present company had obtained the leases of the property from Mesars. Robartes and Basset, together with the plant and machinery, for 4,000ℓ. He then read his report, as follows:—

as follows:—
March y3rd.—It is, in my opinion, highly expedient to determine with accuracy at starting, so far as practicable in mining enterprises, the best plan and modus operands for the efficient, practical, and economical working of the five known lodes traversing the Company's grant. That these lodes contain minerals in paying quantities, no one acquainted with the district and property, can for one moment doubt. The first question to consider is to start the Engine Shaft in a proper position, so as to command the lodes referred to and develop them at the smallest possible expenditure both in time and money. It must be borne in mind, that West Tolgus is to the north; Agar, East Pool, and Carn Brea, are to the south; North Crofty, North Roskear, Seton, and West Seton, to the West; with the cluster of Old, South, and Great South

Agar, East Pool, and Carn Brea, are to the south; North Crofty, North Roskear, Seton, and West Seton, to the Wost; with the cluster of Old, South, and Great South Tolgus to the east. The same cross-course that traverse Carn Brea, East Pool, and Agar, pass into North Pool.

The cross-course which I regard as most important, is that which has made the rich deposits of ore in East Pool; shares in which now command a market value of 690f. each.

The main lode at North Pool stands in virgin ground for 200 fathoms in length east and west of this cross-course, and the remaining four lodes, 200 fathoms west and 600 fathoms east, are wholly unexplored, and, therefore, in my opinion, a shaft should be started from surface, in close proximity to this cross-course, and in such a position as to open out these five lodes with practical despatch and outlay.

Two excellent and well-timbered shafts were sunk by the former Company, at a cost of several thousand pounds, to cut the lodes at these points, but without attaining either object; one called Bendigo Shaft, is 20 fathoms deep, or 24 fathoms under the adit levels; situated about 300 fathoms from Bendigo Shaft, 400 fathoms from the west boundary. This shaft is 150 fathoms west from the

forebreast at the 36 and 43 fathom levels, and also the Western Whim Shaft, sunk on the lode wrought, and which in partial trials yielded upwards of 60,500? profits upon 4,500% outlay.

Whilst the proposed new shaft is being sunk, the engine should be erected, and flat rods extended to Balbarat Shaft, to drain the water from the bottom, and extend therefrom a cross-cut to the main and side lodes, in one of which, it is asid, there remains in the old mine, near this shaft, a course of copper ore, 15 inches wide, worth from 15% to 10% per fathom. By this distribution of forces a comparatively short time will enable us, at the 24 or 48 fathoms levels, by five short cross-cuts, to cut the five lodes, 150 fathoms apart, through the entire length of the sett, and disclose their values at 22 different places, as yet unseen, opening up, if necessary, 44 ends for driving on the lodes, with seven available shafts for general use, when we may reasonably expect to have much assistance from Copper sales, and a most extensive and, I doubt not, valuable mine. I presume North Pool has given more proportionate profits for the ground worked, and strange to say, still contains far more unwrought ground than any mine, wrought working, or unwrought, in this rich mineral district. Situated as this Mine is, on the same and parallel veins as its immediate neighbours and the best mines in the county, the greatest success may very reasonably be expected.

In our necessary operations to accomplish the above work, we shall utilize at least 6,00% worth of labour, materials, and land expended by the former Company. In addition to the good and sterling opinions expressed by the managing agents of Camborne Vean. Carn Brea, North Rosker, North Crofty, South, Francis, Great Retallack, Great Onslow Consols, and Wheal Kitty mines, I may state that it is also the opinion of at least nine-tenths of the respectable miners of the locality, that equally satisfactory results may again be obtained as those already realised. I have, with my friends, tako

Mr. J. S. Philiips then read his report, as follows:

convinced me that the General Manager should devote his time and energies solely to the underground and surface operations.

Mr. J. 8. Phillips then read his report, as follows:

March 20th — Since November, 1862, when active operations were commenced at this mine, the adit level, with such shafts as were imperatively necessary for safety, convenience, and ventilation, have been cleared and re-secured by timber throughout the old mine, from east to west, on the course of the main lode to the present end; where the men have been employed during the last six weeks continuing the cross-cut, driven on a cross-course to communicate with and discharge the water from Ballarat shaft at the adit level, which a few weeks will accomplish, and cnable us to ascertain the bearing and underlie of the lode on which the Ballarat shaft has been, and whereon the new engine shaft is intended to be sunk, or near the East Pool principal mineralizing cross-course, some 150 fms. further west.

This preliminary work is absolutely necessary, to ascertain the best transverse position for this important shaft, to take the lode at proper depth.

Immediately this is stained, I would suggest that this shaft shall be sunk with all practicable dispatch, for a 60-linch pumping engline, when required to be erected thereat, and flat rods extended therefrom to Ballarat shaft, so as to sink these shafts simultaneously near these most important cross-courses to the 48 fathoms level under adit, to cross-cut thereon from these shafts north and south to the lodes, and drive east and west thereon.

But as the western levels on the north lode will be driven into the glebe ground, the sinking of Bendigo shaft may be deferred until ores are discovered of sufficient value to induce the necessity for the outlay.

All these explorations will be in "virging ground," but most favourably approached and appreciated by the cost of, and names given to, the western shaft by the last Company.

As the water will be forked to the 43 fathoms level in the eastern mine, t

Mr. Phillips explained that, after driving a few fms. at the 24 fm. level, one of the inwrought lodes (Evans's) had been intersected, worth 201. per fm.—throughout the ett that lode was standing whole. In fact, going westward, all the lodes were in whole ground. Upon the immediate south parallel were East Pool, Carn Brea, Agar, and West Tolgus. He might state that North Pool possessed more unwrought ground han any mine in that rich district.

Mr. W. C. Vivian enquired if the underlie of the lode that had been intersected was he same as that of the lode which had produced so large a profit upon so small an authar?

Mr. W. C. Vivian enquired which had produced so mage—
the same as that of the lode which had produced so mage—
outlay?

Mr. Phillips replied they had both a north underlie.

The Chairman mentioned that a cross-cut from the 24 would drain the whole mine to the 48 from surface. After having fully considered the matter, he was satisfied that the call which it was proposed to make upon the present occasion would meet every liability that would be incurred during the next six or eight months, as the cost for working the mine would be small. The former workers, after having cut a new bunch of ore in the western ground, never proved its value by extending the levels, owing to some dispute with the largest shareholder. When the mine stopped it was selling for 25,000/.

25,000.

Mr. Phillips explained that the costs charged had been incurred in clearing up-the adit to the cross-cut, and re-timbering the shafts.

The reports were unanimously approved, and ordered to be entered upon the

The reports were unanimously approved, and ordered to be entered upon the minutes.

The Chairman said, in order to liquidate the balance against the company, and to meet the current and future cost of the mine; it would be expedient to make a call of £1,024, which, under the present denomination of shares, would amount to 16. per share.

Upon the proposition of Mr. Goodeve, seconded by Mr. Roberts, it was resolved that a call of £16 per 1-64th share be made, payable at the offices of the company, on or before April 10, allowing 5 per cent. rebate upon calls paid before that date.

The Chairman said it was important that a committee of finance should be appointed, the duties of which would be to check and control the expenditure. The following gentlemen were unanimously appointed members of the committee:—Messrs, Robins, Roberts, Webber, Vickors, Goodeve, and W. C. Vivian; and upon the proposition of Mr. Hurrell, seconded by Mr. Paynter, it was resolved that the general manager (Mr. R. Trediunick), and the secretary (Mr. W. Watson) should be empowered to act on the committee, and that the committee should be empowered to eat on the committee, and that the committee of the general manager and secretary. All cheques to be signed by two members of the committee, and countersigned by either the general manager or seere tary.

The Chairman said-the next proposition upon the agenda referred to a division.

of the committee, and countersigned by either the general manager or secre tary.

The Chairman said-the next proposition upon the agenda referred to a division of the shares. Whether holders were desirous or otherwise of realising upon their interest, it was at all times advisable that the shares should have a commercial value. According to the present denomination, the shares stood at too high a figure to be readily transferred; but if the undertaking were divided into 6,400 shares, as proposed, that difficulty would be obviated. As there was no doubt this property would in a short time be very favourably regarded by the public, some of the present holders might be disposed to realise a portion of their interest, although not disposed to sell the entirety. The course now proposed would afford all these facilities, and, at the same time, could not adversely affect the interest of those who held for investment.

Upon the proposition of Mr. Beazley, seconded by Mr. Phillips, it was resolved that the company do from this date consist of 6,400 shares, instead of 64 as heretofore.

re. the proposition of Mr. Roberts, seconded by Mr. Spargo, it was unsy y resolved that this meeting recognise the valuable services of Mr. J. S.

mimoually resolved that this meeting recognise the valuable services of Mr. J. S. Phillips.

The vote having been appropriately acknowledged, upon the proposition of Mr. Goodeve, seconded by Mr. Milsted, an unanimous vote of thanks was passed to the Chairman for his courteous coulduct in the chair, and for the satisfactory way in which he had brought the Company into its present position.

The Chairman, in acknowledging the compliment, said that no exertion would be spared on his part to promote to the utmost the permanent welfare of the North Pool Mining Company. To those connected with Corniah mining the distinctive characteristics of this mine were known, as well as the extent of the undeveloped ground; but to those uninitiated in mining pursuits is might, perhaps, be necessary to explain that but a very small section of the mine had been wrought, and that upon one lode, which which had produced a net profit of x60,000. At the present time there was a hard bar of ground in the shaft, precisely similar to that which had been met with in East Pool, where, after the hard bar of ground had been passed through, one of the richest bunches of ore ever found in Cornwall had been discovered. North Pool had precisely the same cross-course, and north and south parallel. In the lode cut in the 24, after a two fathoms only had been, driven, there were all the indications that were were four other lodes yet unwrough, he thought he was justified in saying that is a short time it would be his pleasure to congratulate the shareholders upon the realisation of successful results equal to those attained in the rich adjacent properties. (Hear, hear.)

The proceedings then terminated.

MESSRS. TREDINNICK & CO., of 78, Lombard-street, London, E.C., have hitherto almost exclusively directed their attention to British Mines, and to dealings in the shares of those investments. They now, however, have made arrangements as a distinctive branch of their business negotiate the FURCHASE and SALE of RAILWAY STOCKS, DEBENTURES, and BONDS, with all other descriptions of SECURITIES appertaining to Railway Investment, and at the usual range of Commission.

Messrs. TREDINNICK & CO. do not desire to convey to the public the idea that they appreciate Railway Investments more highly than legitimate Mining adventures but simply to indicate that from their intimate connexion with the Mining Market, they are enabled to offer unusual facilities for the exchange of Railway Securities, which pay with but few exceptions, only a very low rate of interest, into approved Mining Shares which yield a much higher return upon the Capital embarked. In fact, the best of our Railways pay from 5 to 7 per Cent, against 124 to 15 per Cent, yielded by sound and legitimate Mines.